



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/733,469	12/12/2003	Victor J. Yodaiken	0125-143	8829

6449 7590 06/20/2007  
ROTHWELL, FIGG, ERNST & MANBECK, P.C.  
1425 K STREET, N.W.  
SUITE 800  
WASHINGTON, DC 20005

EXAMINER
----------

DEBNATH, SUMAN

ART UNIT	PAPER NUMBER
----------	--------------

2135

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

06/20/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

<b>Office Action Summary</b>	Application No. 10/733,469	Applicant(s) YODAIKEN, VICTOR J.	
	Examiner Suman Debnath	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/15/2004.
- 2a) ☐ This action is **FINAL**.      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*Chanhong B. Ph*  
**AU2135**

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/24/2005 &amp; 04/26/2005</u> .                             | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-38 are pending in this application.
2. Claim 1 is amended in the preliminary amendment filed on November 15, 2004.
3. Claims 4-38 are newly presented in the preliminary amendment filed on November 15, 2004.

### ***Claim Objections***

4. Claims 4, 17, 25 and 26 are objected to for lack of antecedent basis:  
Claim 4 recites "the execution scheduling" in line 3.  
Claim 17 recites "the execution scheduling" in line 3.  
Claim 25 recites "the step of sending an encryption key" in line 1.  
Appropriate correction and/or clarification required.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:  

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
6. Claims 1-2, 8-13 and 21-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas (Patent No.: US 7,152,242 B2) and further in view of O'Neal et al. (Patent No.: US 6,640,242 B1), hereinafter "O'Neal".

7. As to claim 1, a computer system, Douglas discloses comprising: a hard real-time operating system (abstract, "...monitors system logs for evidence of malicious or suspicious application activity running in real time.."); an application running under the hard real-time operating system (column 2, lines 30-50, "...the HIDS sensor 20 also monitors the logs of applications running..."); and a security process running under the hard real-time operating system (column 9, lines 3-15, "The HIDS sensor 20 is capable of monitoring the integrity of the Linux kernel"), wherein the security process is configured to periodically, in hard real-time, check the integrity of the application and/or a data element used by the application (column 9, lines 3-15, "The HIDS sensor 20 is capable of monitoring the integrity of the Linux kernel", see also column 4, lines 44-60) and, if the integrity check of the application or the data element indicates that the application or data element has been tampered with, notify a user of the computer system and/or shut down at least part of the computer system or application (column 2, lines 45-60, "The HIDS sensor 20 detects this activity via it's file integrity checking capabilities and, notifying an IDS administrator when key system and security file have been accessed, modified ..").

Douglas doesn't explicitly disclose the security process includes a challenge handler that is configured to receive a challenge from an external monitor and provide a response thereto within a predetermined amount of time, wherein the external monitor is configured so that if the external monitor does not receive the response within a predetermined amount of time from sending the challenge, the external monitor notifies an administrator and/or shuts down at least part of the computer system or application.

However, O'Neal discloses the security process includes a challenge handler that is configured to receive a challenge from an external monitor and provide a response thereto within a predetermined amount of time, wherein the external monitor is configured so that if the external monitor does not receive the response within a predetermined amount of time from sending the challenge, the external monitor notifies an administrator and/or shuts down at least part of the computer system or application (column 19, lines 10-25, "If a system or sub-system fails to respond within a predetermined amount of time, monitor 216 alerts a system administrator..").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

8. As to claim 2, Douglas discloses in a computer system running a real-time operating system (abstract, "...monitors system logs for evidence of malicious or suspicious application activity running in real time.."), a computer security method, comprising: executing a security process under the real-time operating system (column 9, lines 3-15, "The HIDS sensor 20 is capable of monitoring the integrity of the Linux kernel"), wherein the security process is configured to periodically, in hard real-time, check the integrity of an application and/or a data element used by the application (column 9, lines 3-15, "The HIDS sensor 20 is capable of monitoring the integrity of the Linux kernel", see also column 4, lines 44-60) and notify a system administrator and/or shut down the application if the integrity check of the application or the data element

Art Unit: 2135

indicates that the application or data element has been tampered with (column 2, lines 45-60, "The HIDS sensor 20 detects this activity via it's file integrity checking capabilities and, notifying an IDS administrator when key system and security file have been accessed, modified ..").

Douglas doesn't explicitly disclose sending a challenge to the security process or to a challenge handler that monitors the integrity of the security process; and notifying an administrator if a response to the challenge is not received within a predetermined amount of time. However, O'Neal discloses sending a challenge to the security process or to a challenge handler that monitors the integrity of the security process; and notifying an administrator if a response to the challenge is not received within a predetermined amount of time (column 19, lines 10-25, "If a system or sub-system fails to respond within a predetermined amount of time, monitor 216 alerts a system administrator..").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

9. As to claim 21, Douglas doesn't explicitly disclose wherein the challenge is sent from an external monitor. However, O'Neal discloses wherein the challenge is sent from an external monitor (column 19, lines 10-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

10. As to claims 8 and 22, Douglas doesn't explicitly disclose wherein the external monitor is an application running on a second computer system that is connected to the first computer system. However, O'Neal discloses wherein the external monitor is an application running on a second computer system that is connected to the first computer system (column 19, lines 10-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

11. As to claim 9, 10 and 23, Douglas doesn't explicitly disclose wherein the second computer system is connected to the first computer system by a network. However, O'Neal discloses wherein the second computer system is connected to the first computer system by a network (column 19, lines 1-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

Art Unit: 2135

12. As to claims 11, 12 and 13, Douglas doesn't explicitly disclose wherein the external monitor includes a device of the computer system. However, O'Neal discloses wherein the external monitor includes a device of the computer system (column 19-1-20).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

13. As to claim 24, Douglas doesn't explicitly disclose further comprising the steps of receiving the challenge and transmitting the response in response to receiving the challenge. However, O'Neal discloses the steps of receiving the challenge and transmitting the response in response to receiving the challenge (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

14. Claims 3, 27 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over REDSonic, Inc, "<http://www.redsonic.com/en/products/RealTime.htm>"; Copyright 2002, pp 1-4, hereinafter "Sonic" and further in view of Douglas.



Art Unit: 2135

15. As to claim 3, Sonic discloses a computer system, comprising: a dual-kernel operating system comprising a real-time kernel (page 1, Sonic teaches this concept by disclosing the real-time kernel which inserts a thin layer between the interrupt-control hardware and the standard Linux kernel) and a non-real-time kernel ("Linux Kernel" – e.g. page 1); a first real-time thread running under the real-time kernel (page 1, Sonic teaches this concept by disclosing "real-time Linux kernel as a small real-time OS that can suspend Linux's execution at any state"), the first real-time thread being configured to monitor an application running under the non-real-time kernel (page 1, Sonic teaches this concept by disclosing the real-time kernel which inserts a thin layer between the interrupt-control hardware and the standard Linux kernel);

Sonic doesn't explicitly disclose the thread being monitor the integrity; a second real-time thread running under the real-time kernel, the second real-time thread being configured to monitor integrity of the first real-time thread; and a security process running under the non-real-time kernel, the security process being configured to-check the integrity of the first real-time thread and/or the second real-time thread.

However, Douglas discloses the thread being monitor the integrity (column 2, lines 45-50, "...integrity checking feature"); a second real-time thread running under the real-time kernel (column 2, lines 35-60, which describes file integrity checking feature for an additional level of detection"), the second real-time thread being configured to monitor integrity of the first real-time thread (column 2, lines 30-60, "...monitor system files via its file integrity checking feature for an additional level of detection and protection"); and a security process running under the non-real-time kernel, the security

process being configured to-check the integrity of the first real-time thread and/or the second real-time thread (column 9, lines 3-15, "The HIDS sensor 20 is capable of monitoring the integrity of the Linux kernel", see also column 4, lines 44-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic as taught by Douglas in order to "provide notification of the intrusion or intrusion attempts." (Douglas)

16. As to claim 27, Sonic doesn't explicitly disclose wherein the first real-time thread is further configured to check a set of integrity markers of the non-real-time kernel. However, Douglas discloses wherein the first real-time thread is further configured to check a set of integrity markers of the non-real-time kernel (column 2, lines 45-50, "...integrity checking feature").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic as taught by Douglas in order to "provide notification of the intrusion or intrusion attempts."

17. As to claim 31, Sonic doesn't explicitly disclose wherein the second real-time thread is further configured to check a set of integrity markers of the real-time kernel. However, Douglas discloses wherein the second real-time thread is further configured to check a set of integrity markers of the real-time kernel (column 2, lines 45-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic as taught by Douglas in order to "provide notification of the intrusion or intrusion attempts."

18. Claims 4-5 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas and further in view of O'Neal and Williams et al. (Patent No.: 5,911,065), hereinafter "Williams".

19. As to claims 4 and 17, neither Douglas nor O'Neal explicitly discloses wherein the integrity check performed by the security process includes checking the execution scheduling of the application. However, Williams discloses wherein the integrity check performed by the security process includes checking the execution scheduling of the application (abstract, column 4, lines 39-45 and column 6, lines 30-40).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Williams in order to ensuring that the time sequence for the delivery of interrupts is not altered.

20. As to claims 5 and 18, neither Douglas nor O'Neal explicitly discloses wherein the security process is configured to raise an alarm if, after checking the execution scheduling of the application, the security process determines that the application is not being scheduled at a required minimum frequency. However, Williams discloses

wherein the security process is configured to raise an alarm if, after checking the execution scheduling of the application, the security process determines that the application is not being scheduled at a required minimum frequency (abstract, column 4, lines 39-45 and column 6, lines 30-40).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Williams in order to ensuring that the time sequence for the delivery of interrupts is not altered.

21. Claims 6-7, 14 and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas and further in view of O'Neal and Terry (Pub. No.: US 2002/0026505 A1).

22. As to claims 6 and 19, neither Douglas nor O'Neal explicitly disclose wherein the integrity check performed by the security process includes checking the integrity of the application's code. However, Terry discloses wherein the integrity check performed by the security process includes checking the integrity of the application's code ([0074]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Terry in order to report any modifications to management personnel within a business or organization.

23. As to claims 7 and 20, neither Douglas nor O'Neal discloses wherein the security process is configured to raise an alarm if, after checking the integrity of the application's code, the security process determines that the application code has been tampered with. However, Terry discloses wherein the security process is configured to raise an alarm if, after checking the integrity of the application's code, the security process determines that the application code has been tampered with ([0074], "...reports (alerts) the administrative application").

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Terry in order to report any modifications to management personnel within a business or organization.

24. As to claim 14, neither Douglas nor O'Neal explicitly discloses wherein the security process is further configured to update a data item with a sequence number indicating a number of cycles that have passed without detection of an intruder. However, Terry discloses wherein the security process is further configured to update a data item with a sequence number indicating a number of cycles that have passed without detection of an intruder ([0058] – [0059]).

Therefore, it would have been obvious to one of ordinary skill in the art the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Terry in order to report any modifications to management personnel within a business or organization.

25. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas and further in view of O'Neal and Berg et al. (Pub. No.: US 2001/0044904 A1), hereinafter "Berg".

26. As to claim 25, neither Douglas nor O'Neal explicitly disclose further comprising the step of sending an encryption key to the security process at or about the same time as sending the challenge to the security process. However, Berg discloses the step of sending an encryption key to the security process at or about the same time as sending the challenge to the security process ([0071]-[0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Berg in order to ensure the confidentiality of sensitive information.

27. As to claim 26, neither Douglas nor O'Neal explicitly discloses further comprising the steps of receiving the encryption key and encrypting the response using the encryption key prior to transmitting the response. However, Berg discloses further comprising the steps of receiving the encryption key and encrypting the response using the encryption key prior to transmitting the response ([0007], [0027], lines 16-24 and [0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas and O'Neal as taught by Berg in order to ensure the confidentiality of sensitive information.

28. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonic and further in view of Douglas and Berg.

29. As to claim 28, neither Sonic nor Douglas explicitly discloses wherein the integrity markers include a checksum and/or digital signature of a data element that maintains information about a password file used by the non-real-time kernel. However, Berg discloses wherein the integrity markers include a checksum and/or digital signature of a data element that maintains information about a password file used by the non-real-time kernel ([0027], lines 16-24 and [0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by Berg in order to ensure the confidentiality of sensitive information.

30. As to claim 29, neither Sonic nor Douglas explicitly discloses wherein the data element is an inode. However, Berg discloses wherein the data element is an inode ([0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by Berg in order to ensure the confidentiality of sensitive information.

31. As to claim 30, neither Sonic nor Douglas explicitly discloses wherein the application is programmed to encrypt and decrypt passwords stored in the password file. However, Berg discloses wherein the application is programmed to encrypt and decrypt passwords stored in the password file ([0027], lines 16-24 and [0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by Berg in order to ensure the confidentiality of sensitive information.

32. Claims 32-35 and 37-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sonic and further in view of Douglas and O'Neal.

33. As to claim 32, Sonic discloses the real-time kernel (page 1). Neither Sonic nor Douglas explicitly discloses a challenge handler executing under the real-time kernel. However, O'Neal discloses a challenge handler executing under the real-time kernel (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught



by O'Neal in order to in order to protect resources and to ensure safe and secure operations.

34. As to claim 33, Sonic doesn't explicitly disclose comprising an external monitor. However, Douglas discloses an external monitor (column 2, lines 35-60 and column 9, lines 2-10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic by including an external monitor as taught by Douglas in order to "provide notification of the intrusion or intrusion attempts." (Douglas)

35. As to claim 34, neither Sonic nor Douglas explicitly discloses wherein the challenge handler is responsive to challenges sent from the external monitor to the challenge handler. However, O'Neal discloses wherein the challenge handler is responsive to challenges sent from the external monitor to the challenge handler (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by O'Neal in order to in order to protect resources and to ensure safe and secure operations.

36. As to claim 35, neither Sonic nor Douglas explicitly discloses wherein the challenge handler is configured to send a response to the external monitor in response to receiving from the external monitor a challenge. However, O'Neal discloses wherein the challenge handler is configured to send a response to the external monitor in response to receiving from the external monitor a challenge (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by O'Neal in order to in order to protect resources and to ensure safe and secure operations.

37. As to claim 37, neither Sonic nor Douglas explicitly discloses wherein the external monitor is programmed to determine whether the response from the challenge handler was received by the external monitor within a predetermined amount of time. However, O'Neal discloses wherein the external monitor is programmed to determine whether the response from the challenge handler was received by the external monitor within a predetermined amount of time (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by O'Neal in order to in order to protect resources and to ensure safe and secure operations.

38. As to claim 38, neither Sonic nor Douglas discloses wherein the external monitor is further programmed to raise an alarm if it determines that the response from the challenge handler was not received by the external monitor within the predetermined amount of time. However, O'Neal discloses wherein the external monitor is further programmed to raise an alarm if it determines that the response from the challenge handler was not received by the external monitor within the predetermined amount of time (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic and Douglas as taught by O'Neal in order to in order to protect resources and to ensure safe and secure operations.

39. Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Douglas and further in view of O'Neal, Terry and Berg.

40. As to claim 15, neither Douglas and O'Neal nor Terry explicitly discloses wherein the security process is further configured to transmit the data item to the external monitor using an encryption key included in a challenge sent to the challenge handler. However, Berg discloses wherein the security process is further configured to transmit the data item to the external monitor using an encryption key included in a challenge sent to the challenge handler ([0007], [0027], lines 16-24 and [0072]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas, O'Neal and Terry as taught by Berg in order to ensure the confidentiality of sensitive information.

41. As to claim 16, Douglas doesn't explicitly disclose wherein the security process is further configured to transmit the data item to the external monitor within a predetermined amount of time from when the external monitor sent a challenge to the challenge handler. However, O'Neal discloses wherein the security process is further configured to transmit the data item to the external monitor within a predetermined amount of time from when the external monitor sent a challenge to the challenge handler (column 19, lines 10-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Douglas as taught by O'Neal in order to protect resources and to ensure safe and secure operations.

42. Claim 36 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sonic and further in view of Douglas, O'Neal and Berg.

43. As to claim 36, neither Sonic and Douglas nor O'Neal explicitly disclose wherein the response includes an encrypted data item. However, Berg discloses wherein the response includes an encrypted data item ([0007], which describes encrypting and decrypting communications).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the teaching of Sonic, Douglas and O'Neal as taught by Berg in order to increase the security of transferred data.

**Conclusion**

44. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suman Debnath whose telephone number is 571 270 1256. The examiner can normally be reached on 8 am to 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached on 571 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

4D  
SD

Chandra B. Dey  
AU 2135

Application/Control Number: 10/733,469  
Art Unit: 2135

Page 21